

Product Bulletin

HJ-212 to HJ-241 Steering Nozzle Pivot Checks

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Version	Date	Author	Description of Amendment
1.0	21/12/2007	PR	First release (HJ-212 only)

Following a recent accident involving a New Zealand tour boat fitted with a single HJ-212 jet, where the driver reported steering loss, it was found that the top steering nozzle pivot assembly was missing from the jet. The HJ-212 jet concerned had completed 67 hours of operation.

A steering nozzle pivot failure (top or bottom) will lead to complete steering failure, potentially without warning.

The HJ-212, HJ-213 and HJ-241 steering assemblies all feature a similar design of steering pivot. The steering nozzle pivot bolts are required to be tightened to a specified torque and Loctite provides a secondary securing feature.

We require all owners of the jet serial numbers listed in the table below to immediately check the steering nozzle pivots on the jet, which will require each pivot assembly to be REMOVED and refitted. Note that owners should NOT simply check the torque on the steering nozzle pivot bolts as this action may break existing Loctite.

Jet Model	From serial number	To serial number
HJ-212	6621	7487
HJ-213	1045	1197
HJ-241	956	1104

We do not recommend further operation of the jet units affected until this action has been completed.

We wish to draw attention to Section 9.5 of the HJ-212 Product Manual which recommends that specific checks of the jet steering system be carried out. Note that for ease of checking the steering components, owners may wish to leave the Splash Guard (Item 58 on drawing HJ212 07 003) off the jet, instead of periodically removing it to check the steering components.

Refer to HJ-212 Product Manual (089212 – Revision R2, Amendment A40)

1. Referring to drawing HJ212 07 003, access to the TOP steering nozzle pivot will require the Splash Guard [58] to be removed and the Reverse Duct [1] lowered. To remove the Splash Guard refer to Step 2 of Section 9.4.1.
2. To lower the Reverse Duct, perform Steps 1 to 4 of Section 9.2.1 and lower the Reverse Duct until the top steering nozzle pivot is clearly accessible.
3. Referring to drawing HJ212 06 000, remove the top Nozzle Securing Bolt [12]. The Pivot Sleeve [13] and Stepped Adjusting Washer [14] should remain attached to the Nozzle Securing Bolt.
4. Remove all grease and dirt from the threads of the Nozzle Securing Bolt using white spirits (?). Allow to dry and apply a bead of Loctite 243 (not Loctite 222 as currently stated in the manual) along the threads of the Nozzle Securing Bolt and also to the threaded hole on the Nozzle [16]. Immediately refit Nozzle Securing Bolt, Pivot Sleeve and Stepped Adjusting Washer and torque Nozzle Securing Bolt [12] to 40 Nm (30 ft-lbs).
5. Repeat steps 3 and 4 above on the bottom Nozzle Securing Bolt.
6. Check that the Nozzle is free to move fully to port and starboard.
7. Refit Splash Guard and re-attach the Link Actuator to reverse assembly by performing Steps 7 to 10 of Section 9.3.3.
8. Check the Reverse system for normal operation.

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